Freeform Search

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term:

Display: 10 Documents in <u>Display Format</u>: - Starting with Number 1

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

[Search] [Clear] [Interrupt]

Search History

DATE: Monday, November 28, 2005   <u>Printable Copy</u>   <u>Create Case</u>

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
	DB=USPT; PLUR=YES; OP=OR		
<u>L42</u>	'5293163'.pn.	1	<u>L42</u>
<u>L41</u>	'5293163'.pn.	1	<u>L41</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L40</u>	l33 and (bitmap or bit with map or bit near map)	102	<u>L40</u>
	DB=USPT; PLUR=YES; OP=OR		
<u>L39</u>	'5426780'.pn.	1	<u>L39</u>
<u>L38</u>	'5426780'.pn.	1	<u>L38</u>
<u>L37</u>	'6282489'.pn.	1	<u>L37</u>
<u>L36</u>	'6282489'.pn.	1	<u>L36</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L35</u>	l6 and L34	39	<u>L35</u>
<u>L34</u>	l2 and l3 and L33	764	<u>L34</u>
<u>L33</u>	l1 and (map or atlas)	1319	<u>L33</u>
	DB=USPT; PLUR=YES; OP=OR		
<u>L32</u>	'5617319'.pn.	1	<u>L32</u>
<u>L31</u>	'5694534'.pn.	1	<u>L31</u>
<u>L30</u>	'5754846'.pn.	1	<u>L30</u>

L29	'5832406'.pn.	1	L29
L28	'5832406'.pn.	1	L28
L27	'5036471'.pn.	1	L27
L26	'5036471'.pn.	1	L26
L25	'5168452'.pn.	1	L25
L24	'5168452'.pn.	1	L24
L23	'5170353'.pn.	1	L23
L22	'5170353'.pn.	1	L22
L21	'5285391'.pn.	1	L21
L20	'5285391'.pn.	1	L20
L19	'5406493'.pn.	1	L19
L18	'5406493'.pn.	1	L18
L17	'5592665'.pn.	1	L17
L16	'5592665'.pn.	1	L16

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L15	L1 and (kd-tree or kd with tree or kd near tree or kd adj tree)	30	L15
L14	L2 and (kd-tree or kd with tree or kd near tree or kd adj tree)	29	L14
L13	L3 and (kd-tree or kd with tree or kd near tree or kd adj tree)	29	L13
L12	L4 and (kd-tree or kd with tree or kd near tree or kd adj tree)	29	L12

DB=USPT; PLUR=YES; OP=OR

| L11 | '5592665'.pn. | 1 | L11 |

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

| L10 | L5 and (kd-tree or kd with tree or kd near tree or kd adj tree) | 29 | L10 |

DB=USPT; PLUR=YES; OP=OR

| L9 | (5185161 \| 4086632 \| 5592665 \| 5802492 \| 5832406 \| 5815161 \| 5754846 \| 5617319 \| 4937572 \| 5694534 \| 5029125 \| 4937752 \| 4630209 \| 5168452 \| 5150295 \| 4888698 \| 5170353 \| 5295261 \| 5231584 \| 5036471 \| 5285391 \| 5412573 \| 5359527 \| 5367671 \| 4972319 \| 4970652 \| 5406493)![PN] | 27 | L9 |

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L8	('5968109'| '6184823'| '6308177')[ABPN1,NRPN,PN,TBAN,WKU]	6	L8
L7	L6 and (kd-tree or kd with tree or kd near tree or kd adj tree)	6	L7
L6	L5 and (bitmap or bit-map or bit with map or bit near map or bit adj map)	39	L6
L5	L4 and (index or indices or indises)	334	L5
L4	L3 and (sub-areas or sub with areas or subareas or sub ajd segments or sub adj sections)	770	L4
L3	L2 and (parcels or sections or segments)	945	L3
L2	L1 and (features or characteristics)	1539	L2
L1	(geographic or geographical) near2 (database or data with base)	2126	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L24 and "ashby, richard".in.	17

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

[Refine Search]

[Recall Text] [Clear] [Interrupt]

Search History

DATE: **Monday, November 28, 2005** <u>Printable Copy</u> <u>Create Case</u>

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
L26	L24 and "ashby, richard".in.	17	L26
L25	L24 and "lampert".in.	23	L25
L24	"navigation technologies".as.	331	L24
L23	L22 and (rectangle or rectangular or rectangul$)	23	L23
L22	L21 and (index or indices or indises)	42	L22
L21	L20 and (sub-areas or sub adj areas or sub adj segments or sub adj sections)	99	L21
L20	L19 and (parcels or sections or segments)	3284	L20
L19	L18 and (features or characteristics)	5936	L19
L18	geographic$ with (data with base or database)	7999	L18
L17	greographic$ with (data with base or database)	0	L17
L16	340/995	2793	L16
L15	340/991	696	L15
L14	340/990	2319	L14
L13	340.clas.	155748	L13
L12	701/209	1811	L12

L11	701/200	2639	L11
L10	701.clas.	34855	L10
L9	707.clas.	30701	L9
L8	707/200	4122	L8
L7	707/104.1	5028	L7

DB=USPT; PLUR=YES; OP=OR

L6	'4490717'.pn.	1	L6
L5	'4630209'.pn.	1	L5
L4	'4630209'.pn.	1	L4
L3	(4086632 | 5592665 | 5832406 | 5815161 | 5754846 | 5617319 | 4937572 | 5694534 | 4630209 | 5168452 | 5150295 | 4888698 | 5170353 | 5295261 | 5036471 | 5285391 | 5412573 | 5359527 | 4972319 | 4970652 | 5406493)![PN]	21	L3

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L2	('5968109')[ABPN1,NRPN,PN,TBAN,WKU]	2	L2
L1	5968109.pn.	2	L1

END OF SEARCH HISTORY

L23: Entry 20 of 23   File: USPT   Nov 16, 1999

DOCUMENT-IDENTIFIER: US 5987306 A
** See image for Certificate of Correction **
TITLE: System for monitoring telephone networks and/or data communication networks, especially mobile telephone networks

Brief Summary Text (24):
Further advantages and features of the present invention will become evident from the description below taken in conjunction with the attached drawings, and the patent claims attached.

Detailed Description Text (49):
It should be understood that all relevant data are stored in the said database management system DBMS, be it data relating to the configuration of the system components, set-up of measurement data, etc., as well as statistics about all mobile test units MTU and fixed test units FTU and also results from the network and the processed results therefrom, the system handling all data in a consistent manner, utilising the database management system as the preferred storage system which thus eliminates any intermediate formats visible to the user. The database management system is well structured, allowing the user to use pertaining information for applications different from those related to the set of tools associated with the actual network analysis of the cellular network. The open DBMS architecture also offers the user the option of combining the information in the DBMS with other external data sources and to establish links by means of common indices. The DBMS system may be chosen among most standardised database systems available in the market, in particular by using ODBC based technology.

Detailed Description Text (50):
The components mentioned as being part of the CeNA system communicate via standard communication networks based on TCP/IP, making a wide range of configuration solutions possible. The front end FE mentioned, the server CeNAS, fixed test units FTU and the presentation station PS may be geographically distributed and connected via the said network TCP/IP and the database management system DBMS. Because the said TCP/IP is supported by a large variety of base networks it is possible to interconnect components via LAN, WAN, fixed dial-up lines or ISDN. The communication between the mobile test units MTU and fixed test units FTU is implemented via a special modem.

Detailed Description Text (72):
With regard to definitions of areas, the CeNA system will typically work with sub-areas within a measurement area where measurings are performed. These are referred to as geographical areas, and this division is used in order that the operator may be able to carry out differentiated measurings within various sub-areas. For instance, certain problem areas may be given priority higher than where the mobile network functions without problems. The geographical areas are created randomly as polygons which will in turn be defined and named by the operator and also stored in the database management system DBMS for subsequent reference. The geographical areas are defined from the configuration station CS and may either interactively be defined via the GIS system, or be imported from external tables to the DBMS definitions. The geographical areas may also later on be used during presentations in restricting the result areas presented.

Detailed Description Text (74):
This will in actual fact entail a quantisation procedure, since an exact geographical position is being substituted by one or more parcels, comprising small rectangular regions, also referred to as a mesh, comprising the original. An exact point in time is substituted by one or several day periods spanning the original. Exact measurement data will, depending on the topic concerned, be substituted by accumulable quantities, comprising distribution, mean value,

median value as well as standard deviation. Each <u>parcel</u> will comprise its own set of these accumulators, making it possible to collect results from a multitude of measuring sessions, and then to regard these results as properties of individual locations rather than random arbitrary events taking place during individual conversations.

<u>Detailed Description Text</u> (75):
It is expedient that the<u>_parcels</u> are grouped together in what is referred to as map sheets. In principle, a map sheet is a random <u>rectangular</u> region, subdivided into a grid, to form uniformly shaped <u>parcels</u>. In addition to its geographical boundaries and mesh size, a map sheet will also possess some few properties which determine whether or not it will be affected by incoming measurements forwarded to the collector. Among other things, this will include:

<u>Detailed Description Text</u> (177):
When the user/operator has an interesting set of maps, grids and chart overviews, the user will normally prepare a report. The report may be drawn up in many different ways, possibly using <u>features</u> related to Windows, as well as others by chosing in accordance with the presentation station of the system, PS.

CLAIMS:

1. A system for monitoring telephone networks and/or data communication networks, especially cellular mobile telephone networks, the system including a plurality of base stations equipped with a transmitter and a receiver as well as a plurality of mobile units with equipment for communicating with at least one of said plurality of base stations, the system comprising:

an operator of a network;

at least one fixed and/or mobile unit, said at least one fixed and/or mobile unit configured for making at least one observation of quality, and said at least one fixed and/or mobile unit configured for engaging in a communication with said operator, said communication between said at least one fixed and/or mobile unit and said operator occurring via said network;

a database wherein data relating to observations of quality from said at least one fixed and/or mobile unit are stored and processed;

a data processor, said data processor configured so as to be controllable by said operator;

wherein said <u>database</u> is accessed by said data processor to retrieve at least part of said data relating to observations of quality that have been received and stored, the accessing allowing an analysis of larger or smaller<u>_geographical</u> areas, as well as smaller <u>sub-areas</u> and regions thereof, a<u>_geographical</u> position being further definable by smaller mesh-shaped <u>parcels</u>; and

wherein the system further comprises a plurality of fixed and/or mobile units, said at least one fixed and/or mobile unit being one of said plurality of fixed and/or mobile units, said plurality of mobile units having quality observation organs that are equipped to make at least one measurement pertaining to at least one element of the group comprising a reception level, a reception quality, a signal to echo noise ratio, handovers, a time for establishing a connection, a rate of call set-up, blocked calls, failed calls, and failed handovers;

said quality observation organs also equipped for storing, updating, and transmitting said at least one measurement via said plurality of fixed units.

2. The system of claim 1, wherein said <u>parcels</u> are grouped together as map sheets that are sub-divided by a grid.

16. The system of claim 1, wherein said <u>database</u> is an open <u>database</u> and said data relating to observations of quality is for analyzing and for graphical presentation of the quality of said network in selected <u>geographical</u> areas, for accumulating statistics, and for transporting of information to other applications.

18. A system for monitoring telephone networks and/or data communication networks, especially cellular mobile telephone networks, the system including a plurality of base stations equipped with a transmitter and a receiver as well as a plurality of mobile units with equipment for communicating with at least one of said plurality of base stations, the system comprising;

an operator of a network;

at least one fixed and/or mobile unit, said at least one fixed and/or mobile unit configured for making at least one observation of quality, and said at least one fixed and/or mobile unit configured for engaging in a communication with said operator, said communication between said at least one fixed and/or mobile unit and said operator occurring via said network;

a database wherein data relating to observations of quality from said at least one fixed and/or mobile unit are stored and processed;

a data processor, said data processor configured so as to be controllable by said operator;

wherein said database is accessed by said data processor to retrieve at least part of said data relating to observations of quality that have been received and stored, the accessing allowing an analysis of larger or smaller geographical areas, as well as smaller sub-areas and regions thereof, a geographical position being further definable by smaller mesh-shaped parcels;

wherein said observations of quality comprise quality observation measurements that are presented for visualized inspection in at least one form selected from the group comprising map sheets, either as statistical overviews of accumulated measurements or as a route overview for a mobile conversation: a grid overview; and a chart overview; and

wherein a presentation in the form of a route overview includes a built-up route list, said built-up route list comprising at least one element selected from the group comprising identification of a selected mobile unit with associated identification; time for starting and stopping; original cell and cellular network; available themes, including at least one of a reception level, a reception quality, and a time schedule; events that are to be part of the analysis, including at least one of completed or noncompleted handovers, establishment of a connection, blocked call, rejected call, and signal to echo noise ratio; and the presentation being shown in legible symbols.